

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of reducing the nicotine content of a tobacco plant, said method comprising:

applying to the tobacco plant an effective amount of glucose oxidase sufficient to inhibit the synthesis of nicotine in the tobacco plant so that the resulting nicotine content in the plant treated with the ~~nicotine-reducing agent~~ glucose oxidase will yield a non-addictive level of nicotine in the central nervous system blood plasma of the user.

Claim 2 (original): The method of claim 1 comprising treating the tobacco plant in situ.

Claims 3 and 4 (canceled without prejudice).

Claim 5 (Previously presented): The method of claim 1 wherein the glucose oxidase is produced by a tobacco plant herbivore.

Claim 6 (original): The method of claim 5 wherein the tobacco plant herbivore is *Helicoverpa zea*.

Claim 7 (Previously presented): The method of claim 1 wherein the glucose oxidase is biochemically produced.

Claim 8 (Previously presented): The method of claim 1 comprising applying to the tobacco plant the glucose oxidase as a composition comprising an effective amount of the glucose oxidase and a carrier.

Claim 9 (original): The method of claim 8 wherein the composition is selected from an aqueous solution and a salivary extract of a tobacco plant herbivore.

Claim 10 (Previously presented): The method of claim 8 wherein the effective amount of the glucose oxidase is in the range of 2 to 200 grams per 55 gallons of the composition.

Claim 11 (Previously presented): The method of claim 10 wherein the effective amount of the glucose oxidase is 20 to 100 grams per 55 gallons of the composition.

Claim 12 (original): The method of claim 1 wherein the non-addictive nicotine level of nicotine is less than 25 ng/ml in central nervous system blood plasma.

Claim 13 (Previously presented): The method of claim 1 wherein the non-addictive level of nicotine is less than 5 ng/ml in central nervous system blood plasma.

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Claim 14 (original): The method of claim 1 wherein the tobacco plant is selected from the group consisting of *Nicotiana tabacum*, *Nicotiana rustica* and *Nicotiana glutinosa*.

Claim 15 (original): The method of claim 1 wherein the tobacco plant is a genetically modified plant, exhibiting a reduced level of nicotine as compared to non-genetically modified tobacco plants.

Claim 16 (Previously presented): The method of claim 1 comprising applying the glucose oxidase directly to an exterior of a portion of the tobacco plant.

Claim 17 (Previously presented): The method of claim 1 further comprising damaging the tobacco plant prior to applying the glucose oxidase.

Claim 18 (Previously presented): The method of claim 1 comprising applying to the tobacco plant a tobacco plant herbivore and generating conditions on said tobacco plant which result in the tobacco plant herbivore emitting onto the tobacco plant the glucose oxidase.

Claim 19 (original): The method of claim 18 wherein the tobacco plant herbivore is *Helicoverpa zea*.

Claim 20 (Previously presented): The method of claim 1 further comprising repeating the administration of the glucose oxidase to sequentially lower the level of nicotine to the non-addictive level.

Claim 21 (original): A tobacco plant treated in accordance with the method of claim 1.

Claim 22 (Previously presented): Tobacco plant leaves treated with an effective amount of glucose oxidase having a nicotine content such that a tobacco product produced from the tobacco plant leaves will yield a non-addictive level of nicotine in the central nervous system blood plasma of the user.

Claim 23 (original): The tobacco plant leaves of claim 22 wherein the non-addictive level of nicotine is less than 25 ng/ml in the central nervous system blood plasma.

Claim 24 (original): The tobacco plant leaves of claim 22 wherein the non-addictive level of nicotine is less than about 5 ng/ml in the central nervous system blood plasma.

Claim 25 (original): The tobacco plant leaves of claim 22 is selected from the group consisting of *Nicotiana tabacum*, *Nicotiana rustica* and *Nicotiana glutinosa*.